### PROJECT DESCRIPTION

#### I. GENERAL

THIS PROJECT INVOLVES THE REPLACEMENT OF THE EASTBOUND AND WESTBOUND MD 28 SAMPLING LOOPS WITH VIDEO DETECTION AND THE REPLACEMENT OF THE WESTBOUND MD 28 LEFT-TURN PRESENCE DETECTION LOOPS WITH VIDEO DETECTION AT THE INTERSECTION OF MD 28 (W. MONTGOMERY AVE.) AND DARNESTOWN RD. IN MONTGOMERY COUNTY.

MD 28 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

# II. INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FOUR PHASE, FULLY-ACTUATED TRAFFIC MODE. THE EXISTING WESTBOUND EXCLUSIVE LEFT-TURN, AND NORTHBOUND RIGHT-TURN WILL OPERATE CONCURRENTLY AND MAINLINE PEDESTRIAN PHASES WILL REMAIN.

THE AUDIBLE PUSHBUTTONS WILL FUNCTION AS FOLLOWS:

1. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL ANNOUNCE THE FOLLOWING MESSAGE:

SOUTH LEG: "Wait to cross Darnestown at West Montgomery, Wait." WEST LEG: "Wait to cross West Montgomery at Darnestown, Wait."

2. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

### III. SPECIAL NOTES

- 1. MONTGOMERY COUNTY SHALL PERFORM THE INTERNAL WIRING OF THE CONTROLLER/CABINET. THE CONTRACTOR SHALL PURCHASE AND DELIVER THE AUDIBLE/TACTILE PUSHBUTTONS TO THE MONTGOMERY COUNTY TECH CENTER FOR INSTALLATION AND PROGRAMMING. THE CONTRACTOR SHALL CONTACT MS. EILEEN NORMAND AT 310-279-1291, AT LEAST THREE (3) DAYS PRIOR TO THE DELIVERY.
- 2. MAINTENANCE OF TRAFFIC WILL BE PERFORMED BY THE CONTRACTOR UTILIZING THE STANDARD PLATES FOR TRAFFIC CONTROL FROM SECTION MD 104.00 OF THE SHA BOOK OF STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES.
- 3. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES.

# PROJECT CONTACTS

1. THE FOLLOWING ARE THE CONTACT PERSONS FOR THE PROJECT:

MS. ANYESHA MOOKHERJEE , ASSISTANT DISTRICT ENGINEER - TRAFFIC PHONE: (301) 513-7498

MR. TOM FOUNTAIN, ASSISTANT DISTRICT ENGINEER - MAINTENANCE PHONE: (301) 513-7304

MR. VICTOR GRAFTON, UTILITY ENGINEER PHONE: (301) 513-7350

MS. CORREN JOHNSON, DIVISION CHIEF - TRAFFIC OPERATIONS, OOTS PHONE: (410) 787-7630

MR. EDWARD RODENHIZER, CHIEF - SIGNAL SHOP PHONE: (410) 787-7652

MR. EUGENE BAILEY, CHIEF - SIGN SHOP PHONE: (410) 787-7676

## EQUIPMENT LIST 'A'

A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR.

DESCRIPTION CATEGORY QUANTITY

CODE

120500

VIDEO DETECTION INTERFACE UNIT 1-4 CAMERAS 900000

### EQUIPMENT LIST 'B'

1 LS

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR QUANTITY CATEGORY DESCRIPTION CODE

MAINTENANCE OF TRAFFIC

585405	70 LF	5" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585412	200 LF	12" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585424	120 LF	24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
800000	3 EA	VIDEO DETECTION CAMERA AND CABLE, ANY LENGTH

### EQUIPMENT LIST 'C'

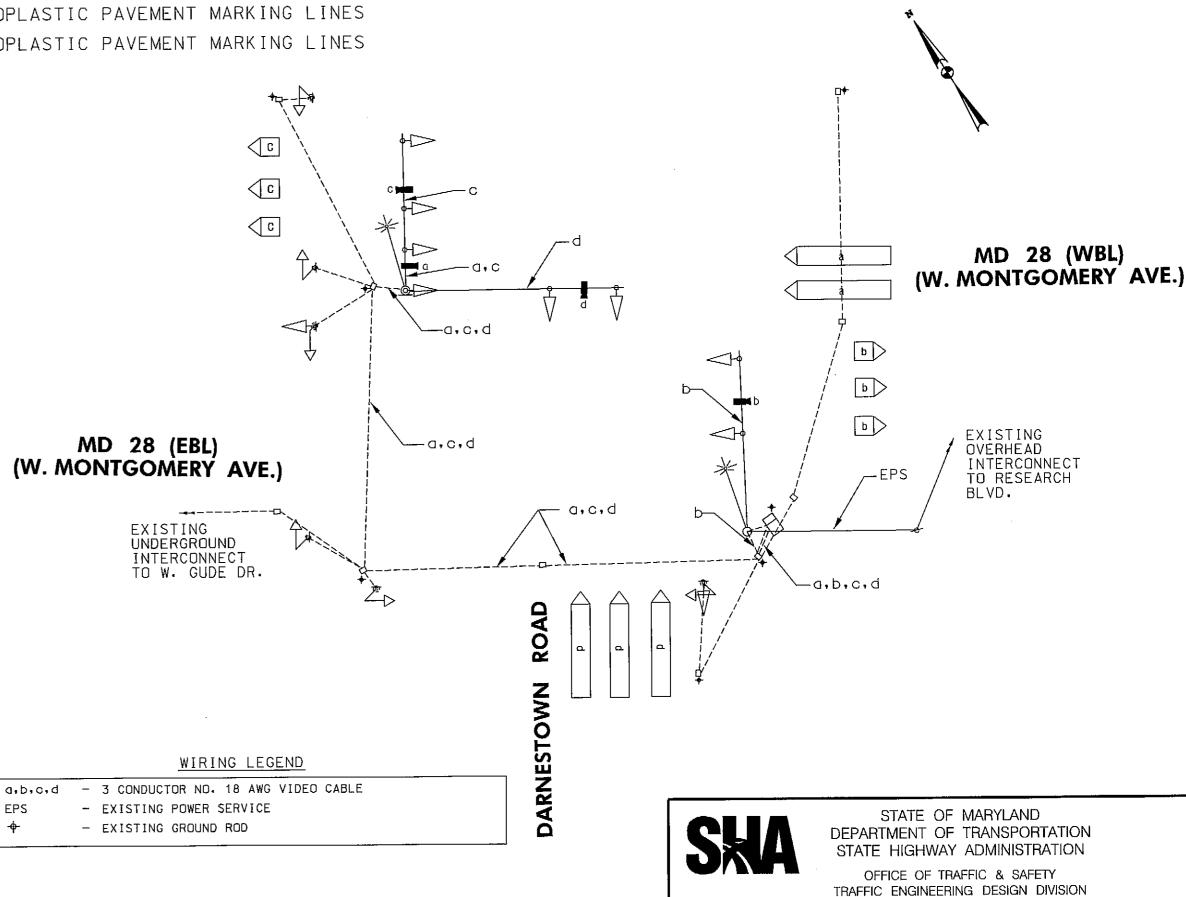
C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

(R) (R) (Y) (Y) (G) (G) R Y G RYG  $\overline{\mathsf{G}}$  $R \mid R \mid R/G \rightarrow \mid R \mid R/G \rightarrow \mid DW \mid DW \mid DW \mid W/K \mid W/K$ R | ←G-| ←G-| PHASE 5 ALT.  $R \mid R'G \rightarrow \mid R \mid R'G \rightarrow \mid DW \mid DW \mid DW \mid FL/DW \mid FL/DW \mid \bot$ PED CLEARANCE  $R \mid R/G \rightarrow \mid R \mid R/G \rightarrow \mid DW \mid DW \mid DW \mid DW \mid DW$ PHASE 5 ALT. CHANGE  $|R/G\rightarrow|R|R/G\rightarrow|DW|DW|DW|DW|DW|DW$ R | R | R | ←G-| ←G-| PHASE 2 & 5  $G \mid RY \rightarrow \mid R \mid RY \rightarrow \mid DW \mid DW$ DW **|**←Y−|←Y−| G PHASE 5 CHANGE R | R | W/K | W/K | DW | DW | DW | DW PHASE 2 & 6 R |FL/DW|FL/DW| DW | DW | DW | DW | ← R -- | ← R -- | G PED CLEARANCE DW DW | DW DW PHASE 2 & 6 CHANGE l Dw i Dw i Dw i DW DW DW GIGI  $R \mid R \mid R \mid \leftarrow R - \mid \leftarrow R - \mid R \mid R$ PHASE 4 PHASE 4 CHANGE G DW DW WK WK DW DW PHASE 4 ALT. G DW DW FLDWFLDW DW DW '←R-|←R-| R | R G PED CLEARANCE | DW | DW | DW | DW | DW | 4-R−Ì4-R−| R | R PHASE 4 ALT. CHANGE FL/Y | FL/Y | FL/Y |FL/RA|FL/RA| FL/Y | FL/Y | FL/R | FL/R | DARK|DARK|DARK|DARK|DARK FLASHING **OPERATION** 

WIRING DIAGRAM

PHASE CHART

7 8 9 10 11 12 13 14 15 16



<u>CENTURY</u>

ENGINEERING CONSULTING ENGINEERS - PLANNERS 10710 GILROY ROAD HUNT VALLEY, MD 21031

CELPROJECT NO. 27257.49

SCALE NONE ADVERTISED DATE APR. 19, 2013 CONTRACT NO. MO1315177 COUNTY MONTGOMERY DESIGNED BY \_\_\_\_LL DRAWN BY LL /BDL LOGMILE 15002820.42 CHECKED BY NMR

F.A.P. NO. \_\_\_\_\_ AC-NHPP-G-5010(15)E TS NO. 3339B

TIMS NO. <u>L510</u> TOD NO. SHEET NO. 2 OF 2 DRAWING **SG-02** OF 02

MD 28 (W. MONTGOMERY AVENUE) AT DARNESTOWN ROAD

ROCKVILLE, MARYLAND

GENERAL INFORMATION SHEET

ADDENDUM NO. 2

DATE: 04 -